Tm-Pt1000

Module Temperature Sensor with Platinum Resistance

Short Description

Our module and surface temperature sensors come equipped with a robust weatherproof cable. Thanks to the use of top quality components the sensors achieve very high accuracy and are ideal for use in industrial and field environments (PV module temperature).
The sensors comply to all requirements as per IEC 61724-1 and are suitable for bifacial modules.

Technical Data

Types	Tm-Pt1000
Sensor Element	Pt1000 Class A as per EN 60751
Sensor Housing	Self-Adhesive Aluminum Block, 35 mm x 12 mm x 6 mm
Sensor Cable (Pt1000)	Length: 3 m, PUR coated, shielded (LiYC11Y, 2 x 0,25 mm²)
Weight	Approx. 70 g
Operating Condition	-40 to +90 °C (see below Installation Instruction)
Customs Tariff Number / HS Code	90 25 19 00

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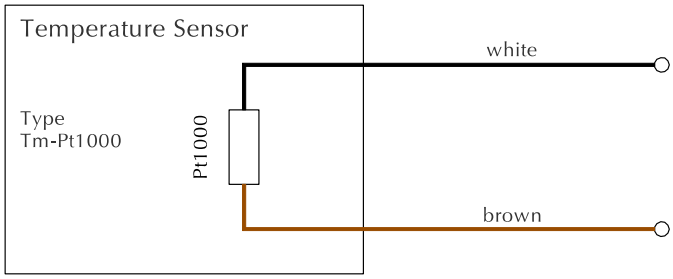
Safety Instructions

The installation and assembly of electrical equipment must be carried out by electrically qualified persons.
The sensor may not be used with equipment whose direct or indirect purpose is to prevent human death or injury, or whose operation poses a risk to humans, animals or property.

Electrical Connection

The sensors are designed for safety extra-low voltage (SELV) operation.
For keeping the accuracy of the sensor a 4-wire measurement is strongly recommended.
Due to the self-heating, the wire current affects the accuracy of the measurement. Thus, the same should not exceed 0.1 mA.

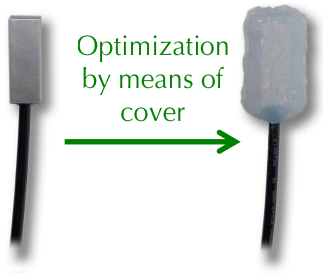


Installation Instructions

The sensor element is mounted by gluing the Aluminum block directly to the measurement surface. The surface must be dry, clean and degreased. Cleaning should NOT be done with glass cleaner, as some glass cleaners contain additives to prevent soiling after cleaning and these additives also prevent adhesion. Isopropyl Alcohol or Ethanol is recommended for cleaning. It is also recommended using an extra fixing with silicon or Sikaflex, particularly for module temperature above 75°C. If mounted outdoors, avoid direct exposure to sunlight and rain to the sensor housing (Aluminum block). If necessary, provide protection from the sun and rain.

Note: The module temperature measurement can be optimized by completely covering the sensor element.

The sensor cable needs a cable grip close to the sensor housing.



Maintenance

Scope of the regularly check (at least every 2 years): Cleaning, external damage, mechanical fastening, cable laying and any damage to the cable.
Should damage be found that degrades the function or safety, the sensor is to be replaced.

User information

The sensor is designed for the measurement of a surface temperature. The warranty is for 1 year from the date of the invoice for the intended use. M&T does not accept any liability for possible losses or damage due to the incorrect usage of the sensor. Liability for consequential damages is excluded.